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ABSTRACT

A study examined the literacy practices in community colleges, comparing literacy practices in occupational/technical classrooms with those in academic/liberal arts classrooms. "Literacy" is taken to mean both reading and writing and to include texts that are non-verbal--graphic or symbolic. The study was carried out by 8 researchers observing over 250 classrooms and interviewing more than 300 instructors and administrators at 33 colleges in 11 states. Results indicated that less than 1% of occupational/technical classrooms attempted to teach verbal reading at all and, out of 250 classrooms, 102 (about 40%) displayed no explicit instruction in how to learn from texts related to the class and provided no social arrangements to enable students to draw upon each other's ability to learn from text. In 75% of classrooms (186), the power to determine what the text meant was claimed by the instructor and student interpretation of the text was not encouraged. A large minority of classrooms (106) exhibited literacy practices in which students were taught explicitly what the codes in which the respective texts were embedded meant; 70% (74) also exhibited social arrangements enabling students to learn from each other. About a third of the classes observed were conducted in a way that suggested that instructors had not accommodated their expectation that students would be non-expert readers and writers in their classroom teaching strategy. Findings suggest that among the total distressed classes (62 out of 250), 36 out of 62 were found primarily among the 40% of classrooms receiving no explicit instruction in reading texts. (Contains 2 figures of data and 66 references.) (CR)

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Signs and Wonders: The Negotiation of Literacy in Community College Classrooms

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Summary of presentation at AERA March 1997

The need for a study of teaching in the community colleges

No empirically-based aggregate portrait of community college classroom practices exists at present, despite the increasing national visibility of community colleges as the primary site of low-cost, accessible sub-baccalaureate training and education to support competitivenes in a global economy. This study addresses that lack by presenting a picture of community college classroom practices based on observations of over 250 classrooms and interviews with over 300 instructors and administrators at 33 colleges in 11 states.

The background of this study

This study was carrried out by eight researchers, four of whom were panelists at the March 1997 AERA conference in Chicago: Dr. Barbara Byrd, Stan Goto, Elnora Webb and myself, Helena Worthen. The study was under the direction of Dr. W. Norton Grubb of the Graduate School of Education at U.C. Berkeley and funded through the National

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Center for Research in Vocational Education at U.C. Berkeley. We visited academic/liberal arts, remedial, and occupational/technical classrooms in an attempt to get as broad a sample as possible within the constraints of time and funding. The statements about community colleges that follow reflect what we found in our data.

Focus on literacy practices within this study

My focus within this study is literacy practices. Reflecting the tension between the two traditional missions of community colleges, it compares literacy practices in occupational/technical classrooms with literacy practices in academic/liberal arts classrooms. This summary is elaborated in my doctoral dissertation (U.C. Berkeley, December 1997) of the same title.

The opportunity to learn in the community college classroom depends to a great extent on how the social practices that invoke literacy are negotiated. Yet, just as no general picture of what happens inside community college classrooms exists, so there is also no portrait of classroom literacy practices. I participated in the data gathering work of our research team and then studied the observations, interviews and supporting material (syllabi, course catalogs, institutional research reports) with their literacy practices in mind. I asked, "What are the literacy practices typical of community college classrooms?" and "How do the literacy practices of community college classrooms affect the

opportunity to learn in the classroom?" One influence behind my interest in the opportunity to learn in these classrooms was the criticism of academic programs and language arts programs expressed primarily by instructors from the occupational/technical side of the college. Many occupational/technical instructors felt that their students did not benefit from instruction in classrooms to which they were referred for either remedial purposes or because of program or college level requirements. Although these instructors agreed that their students found learning from text difficult (texts in these classes were often highly technical and challenging), they did not have confidence that the kind of instruction they would get in academic or remedial classrooms would help their students.

Expectations about student literacy in community colleges

Expert literacy on the part of students is not taken for granted within community colleges. Ninety percent of community colleges offer remedial programs (Philippe, AACJC 1995). This is the case whether they are located within the high-tuition states or the low-tuition states. (Tuition costs ranged from California's $350 per full-time enrollment year to New York, Massachusetts and Vermont's $2,000 -- $3,000 per year.). Our interviewees reported that about thirty percent of students were referred to remedial programs or learning labs.

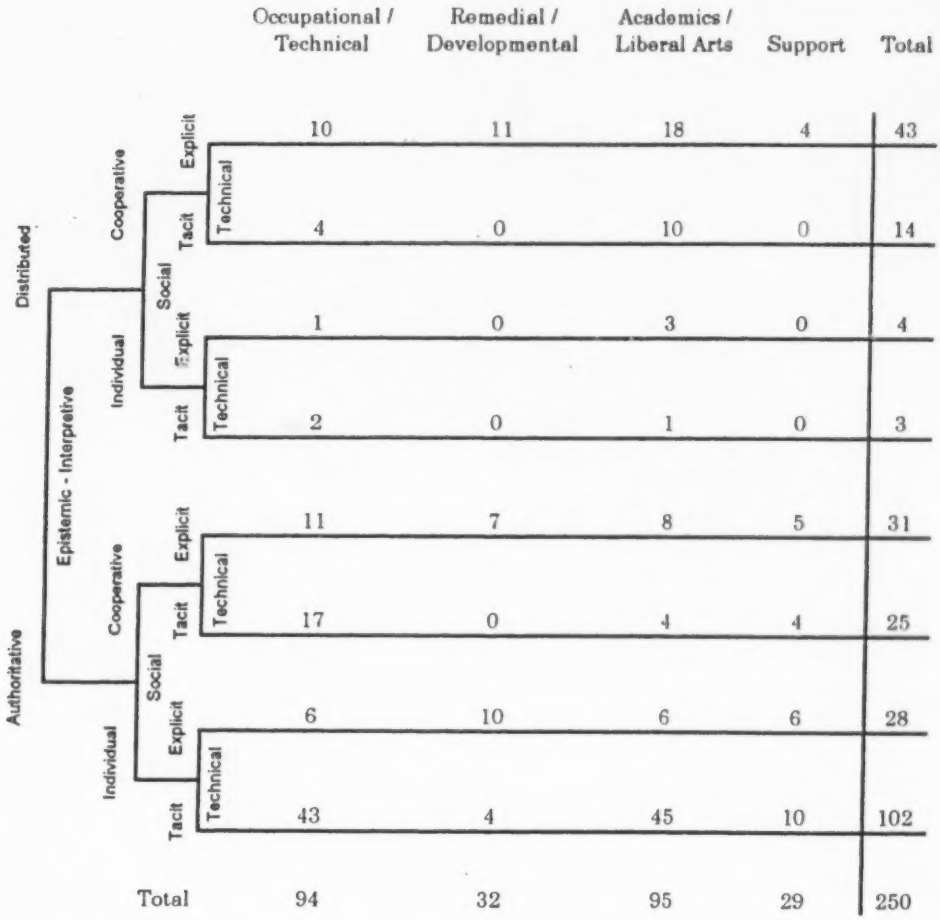
Summary results of the study

This study takes "literacy" to mean both reading and writing and to include texts that are non-verbal -- graphic or symbolic.

Despite the expectation that students will not be self-sufficient at learning from texts, reading is typically seen as a teachable subject only at the most basic verbal remedial level. Less than 1 percent of occupational/technical classrooms attempted to teach verbal reading at all, even reading at the level of text structures rather than word or sentence level. Out of 250 classrooms, 102 (or about 40%) displayed no explicit instruction in how to learn from the texts related to the class and provided no social arrangements to enable students to draw on each other's ability to learn from text (see Figure 1.) In these classes, students for whom reading was difficult did not get any assistance in reading.

Writing beyond the most basic levels is taught as a support for learning in academic/liberal arts programs, with emphasis on the production of essay/expository forms. Students in occupational/technical programs who test as unprepared for transfer level composition courses are likely to be placed in "communications" classrooms which provide instruction in sub-transfer level but nonetheless typically expository writing. Often, narrative (personal narrative, journal-writing) is taught in these classes as a step toward understanding the difference between narrative and expository forms. The literacy artifacts of disciplines that do

Figure One: Classes sorted by literacy practices



CLASSES SORTED BY LITERACY PRACTICES

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not typically employ expository writing are not taught outside of courses dedicated to that discipline. (Examples of such artifacts are multi-level indexes, flow charts, program code, musical notation or tablature, graphic diagrams of all types, blueprints, scientific symbols, and mathmatical symbols and expressions above the level of basic arithmetic.) As far as instruction goes, "literacy" in the community colleges is taken to be a matter of writing expository text -- not reading, and not graphic, symbolic or even verbal text structures other than expository.

In addition, writing is seen as a mirror of thinking, consistent with its construction as an individual skill and with the theory of learning that prevails in community colleges, the "strong" version of cognitive theory (see Bruner 1986, 1990, 1996; Cole, 1996) that takes cognitive operations to be latent in the neurological architecture of individual minds, triggered by explicit instruction and practice (see Chosmky 1959; Gardner 1973, 1987, 1993; Goody 1977, 1986, 1987; Greeno, 1997; Piaget 1951, 1951; Pinker, 1994; Roueche 1972). Testing and placement practices are consistent with this theoretical approach. The constraints of time and budget, which isolate instructors in the classroom, encourage repetition of course presentation over many semesters or years, and limit opportunities for professional development, predispose community college instruction to be framed by reductive versions of cognitive theory.

Contrasts between occupational/technical and academic/liberal arts classrooms

Occupational/technical and academic/liberal arts classrooms differ in verbal, graphic, and notational text forms; acceptance of non-standard English and languages other than English; type of text structure and purpose of text use. In occupational/technical classes, students were taught program-specific unique text structures such as manuals, codes, indexes, invoices, repair orders, or lab reports. They were taught them not for the purpose of individual interpretation of these texts but so that they could carry these texts (whether as reference materials or as texts that they would write) into the workplace and use to them negotiate authority in the workplace. In academic/liberal arts classes, students were taught generic text structures such as essays, short stories, novels (composition and literature classes tended to teach genres) but not the text structures of textbooks. Occupational/technical and academic/liberal arts classes overall did not differ in level of difficulty of texts. It was clear from our observations that texts assigned in occupational/technical classrooms were equally difficult, in terms of vocabulary, length, specialization and text structure, as those assigned in academic/liberal arts classes. In fact, occupational/technical classrooms appeared to make higher demands on students in terms of use precise terminology.

A minority of occupational/technical classrooms exhibited participant structures invoking the entire knowledge domain of the

workplace despite heterogeneous literacy skills of students. Classrooms that were notable in this regard were some teaching foodservice management, electron microscopy, and early childhood development. The hypothesis that this type of participant structure would be a feature of an occupational/technical program that led to a high-skill high-wage job was not upheld, as early childhood development, leading to work in daycare situations, is a low-wage job.

Literacy practices as contexts for context-specific cognitive tasks

Rather than representing literacy as a singular cognitive skill, my study proposes that each time instructors and students negotiate the participant structure of a literacy practice, they create context-specific cognitive tasks. Each context differs from the others in the way that it enables, discourages or otherwise constrains learning from text. For example, a student taking a multiple choice test based on lectures he or she has listened to plus reading assignments is doing a different cognitive task from a student presenting orally as part of a study group of other students to the class and the instructor, although each of them might be "taking the final exam" in psychology or accounting. Students reading aloud to each other are performing a different cognitive task from a student reading alone in the library, although both might be reading the same text. The interpersonal, social, material and motivational aspects of these tasks differ; how a student thinks about each task differs.

The unit of analysis, literacy practice, is drawn from sociocultural theory (see Bateson 1972; Cole 1996, Darrah 1991; Engstrom 1996,1997; Gee 1991,1992; Gowen, 1992, 1996; Hull 1993, 1997; Hull and Rose 1989; Hutchins 1996; John-Steiner 1991; Lankshear 1987; Lave 1998, 1996: Lave and Wenger 1991; Myers 1996; Newman, Griffin and Cole 1989; Scribner 1990, Scribner and Cole 1981; Street 1984; Tobach et al 1997; Vygotsky 1962, 1978, 1994; Wertsch 1979, 1991a, 1991b). I drew on Gee 1991, deVries 1997, Myers 1996, Sarmiento and Kay 1990, and Simon, Schenck and Dipp 1991 to distinguish three dimensions of a literacy practice. Each of these has a range, which makes possible a sorting of our data into eight different configurations of literacy practice. Each of these represents a different class of cognitive tasks.

Figure 1 displays the 250 classroom observations sorted according to these three dimensions into these eight dimensions. Each dimension has a range:

The epistemic/interpretive dimension ranges from authoritative (instructor or remote authority determines meaning of text) to distributed (class or class and instructor determine meaning of text).

The social dimension ranges from individual (students work alone to interpret text or produce text) to cooperative (students work together to interpret or produce text).

The technical dimension ranges from tacit (no explicit instruction in how to break the code in which the text is represented) to explicit (the code of the text is explicitly taught).

Figure 1 displays the way in which our observations sorted out along these dimensions. In forty percent (102) of all classrooms we observed, students were getting no explicit instruction in how to learn from text nor were they being assisted to draw on the various abilities of other classmates through social arrangments such as small group discussions, cooperative projects, reading aloud to the class, etc. In these classes, no accomodation was made to the assumption that community college students are not expert readers. In 75 percent of classrooms (186) the power to determine what the text meant was claimed by the instructor as final authority or by the instructor in the name of some remote authority (the textbook author or publisher or a certification exam, for example). In these classes, student interpretation of the text was not encouraged. Students did not learn to develop interpretations of text. In many occupational/technical programs, of course, individual interpretations of texts such as regulations and manuals would be counterproductive and even dangers. However, this distinction between text use in occupational/technical and academic/liberal arts programs was never made explicit by instructors when they criticized the use of texts in programs in the other category.

A large minority of classrooms (42 percent, or 106) exhibited literacy practices in which students were taught explicitly what the codes in which the respective text were embedded meant. However, these classes included remedial classes in which explicit teaching of features of text is the core of the curriculum, and occupational/technical classes in which instruction in unique text structures (blueprints, invoices, repair orders, lab reports. et.c) and terminology is expexted. Of these, 70 percent or 74 also exhibited social arrangements which enable students to learn from each other -- that is, they were encouraged to work together in a way that would mean that each student would have access to the pooled collective understanding of a text. Students provided for each other the transition from written to oral forms of information. In these classrooms, students worked in small groups, read the text aloud, offered definitions of words, asked each other questions, disagreed and debated interpretations, drafted written materials in groups or worked with partners. Discussion betweenand among students was encouraged. A small number (11 out of 32) of remedial classrooms took this approach. n

Literacy practices of the classroom and how they affect the opportunity to learn

Selections from field observations suggest that configurations differentially constrain learning from text for individual students. Students who are not expert readers need to be taught explicitly what

words, sentences, graphic or symbolic forms of representation and text structures mean. Classrooms in which such technical features of language are not explicity taught disadvantage students who happen to not know what these conventional features mean. Students also need the assistance of other students to assemble composite understanding of texts, as individuals who find reading difficult waste hours of classroom time and months of enrollment if they can not benefit from opportunties presented in the social environment of the classroom.

Configurations also affect the quality of what the class offers to the student to be learned. As our data gathering progressed, we found it impossible to ignore the number of distressed classes (62 out of 250) we observed (see Figure 2). When I sorted out classes according to literacy practice, I noted that distressed classes (36 out of 62) were found primarily among the 40 per cent of classrooms in the sample where students received no explicit instruction in reading verbal texts and did not work together to share understanding of texts. Further examination of these classrooms (the 102 classes that were of the Authoritative-Individual-Tacit configuration) suggested that instructors chose one of three strategies to address the problem of presenting information when students could not be counted on either to learn independently from text or to learn from each other through social interactions.

Figure 2: Problem or distressed classes

	O/T	R/D	A/L	S	T-T (team-taught)	Totals
DCE	0/8	0/9	0/6	0/3	3/19	3/45
DCT	0/4	0/0	1/5	0/0	1/6	2/15
DIE	0/0	0/0	1/1	0/0	1/3	1/4
DIT	0/0	0/0	0/1	0/0	1/1	1/2
ACE	0/11	1/6	0/6	1/3	0/5	2/31
ACT	0/17	0/0	0/0	2/4	2/4	4/25
AIE	0/6	6/9	1/4	4/5	2/2	13/26
AIT	7/43	4/4	13/30	2/9	10/16	36/102

(Totals 62/250)

A= Authoritative
I= Individual
E=Explicit
C=Cooperative
T=Tacit
D=Distributed

Figure 2.
Problem Classes
(Above Slash)

One strategy was to provide, often within class time but sometimes in addition to class time, non-text information sources through which students could learn information. These non-text sources might be films, videos, taped music, slide shows, demonstrations, displays of samples (bones, rocks, etc.) guest speakers or field trips or referrals to computer-assisted instruction in technology labs. These non-text sources could be expected to enrich or supplement the lecture, perhaps replacing what might have been learned from text. The literacy practice in such a class could be seen as skirting the question of the student's ability to learn from text. However, evaluation in these classes was often on the basis of a written exam or research paper; what a student might have learned from a non-text source would have to be expressed in text, perhaps without explicit teaching of producing such a text.

A second strategy was to treat the ability to learn independently from text as an aspect of what was being evaluated in the class. Students were tested on information that was found in the assigned texts even if it had not been presented in lectures or otherwise in the classroom. This strategy was found typically in classes where the instructor had a great deal of material to cover and did not feel that he or she was required to make sure that all the students suceeeded in the class. Such classes, for example, might be rely on multiple choice exams and be graded on a bell curve. Instructors defended this strategy by arguing that they were teaching "college-level" material, and that students should not have to be

taught to read and write. In these classes, the literacy practices inside the classroom placed students in competition with each other for the scarce resource of a good grade, and individual ability to read and write gave some students competitive advantages over others. This strategy, although it sorted students in terms of how hard they worked and how serious they were about learning, also sorted them in terms of their ability to read and write prior to the class.

The third strategy was to simplify the material in the class to what could be presented and discussed in the absence of other resources such as outside reading, videos, films, etc. In these classes, the instructor would present material and students would discuss it, apparently without having done any outside or assigned reading and without being able to draw on any other information sources other than popular knowledge or personal experience. These classes were the ones most likely to be distressed and often exhibited a distinct negotiating down of course content. In these classes, the literacy practices (that is, the absence of text as a source of information) may have made access to learning equitable for all students, whether or not individual students were able to learn independently from text, but the quality of what was accessible was diluted.

Summary conclusion

Despite the expectation that students in community colleges will not be able to learn independently from text, instructors do not teach

reading except at either the most basic level or else in technical courses devoted to a particular type of non-verbal reading (blueprints, programming code, etc,). Instructors, most of whom appear to construct learning in terms of traditional "strong version" cognitive theory, do not typically think of reading and writing as literacy practices, that is, interpersonal, social activities. Instead, they tend to think of literacy as a matter of individual skill or text difficulty level, which does not lead naturally to a re-assessment of classrooms practices to improve student opportunities to learn.

About a third of classes observed were conducted in a way that suggested that instructors had not accomodated their expectation that students would be non-expert readers and writers to their classroom teaching strategy. Among these were most of the distressed classes, in particular classes in which no learning from text nor substitutes for learning from text seemed to be expected.

Links to policy literature

The policy literature (see Adelman,1994; Brint and Karabel ,1989; Clark, 1960; Cohen and Brawer,1989; Deegan and Tillery, 1985; Griffith and Connor, 1994; Lavin and Hyllegard, 1996; London, 1978; McGrath and Spear, 1991; Pincus, 1980; Richardson, Fisk and Okun, 1983; Shor, 1980; Traub, 1994; Zwerling, 1976; Zwerling and London, 1992) which addresses the overall social impact of community college programs, raises

the issue of literacy mainly as an element in the discussion of standards. According to this literature, literacy is viewed as an individual skill or a level of text difficulty. Standards, then, are either levels of individual literacy skill (thresholds for a specific class, for example) or difficulty levels of texts used in classes. They treat the classroom as a black box, addressing input and outcome as if what goes on in the classroom is unknowable and unpredicable. They are not related to what goes on inside the classroom, which, as we have seen, can vary greatly, generating a variety of cognitive tasks according to the literacy practices that are inegotiated through the classroom participation structures. This study offers a way to understand the range of literacy practices, and thus other types of practices, in the classroom, and a way to evaluate them in terms of the degree to which they encourage or deter learning. If the community colleges are to maintain their reputation as accessible, non-selective institutions that nonetheless provide genuine learning opportunities, the opportunity to learn should not stop at the classroom door but should be a goal of classroom practices, including literacy practices. By re-defining standards as a product of classroom practices, this study links the opportunity to learn in the classroom with the policy concerns as voiced by the instructors and administrators whom we interviewed: underfunding, the economically marginal lives of students, and lack of educational leadership.

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